## Solving Proportions

Directions: Solve each proportion. Express your answers as a mixed number or as a fraction in simplest terms.

1. $\frac{5}{8}=\frac{x}{32}$
2. $\frac{6}{25}=\frac{32}{x}$
3. $\frac{1.2}{x}=\frac{24}{30}$
4. A 6 -foot tall man casts a shadow that is 9 feet long. At the same time, a nearby flagpole casts a shadow that is 60 feet long. How tall is the flagpole?
5. A recipe requires $\frac{2}{3}$ cup of brown sugar to make 20 cookies. How much brown sugar is required to make 35 cookies?
6. $\triangle A B C$ is similar to $\triangle D E F$. Find the value of $x$.

7. $\frac{x+12}{9 x}=\frac{5}{9}$
8. $\frac{x}{20}=\frac{x-4}{5}$
9. $\frac{18+x}{14-x}=\frac{3}{7}$
